



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,815	12/07/2001	Romel Amineh	367.40825X00	7745
20457	7590	09/08/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			DANG, HUNG Q	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/004,815

Applicant(s)

AMINEH, ROMEL

Examiner

Hung Q Dang

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15 is/are allowed.
- 6) ☒ Claim(s) 1,4-8,11,16 and 17 is/are rejected.
- 7) ☒ Claim(s) 2,3,9,10,18 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/13/04;7/20/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-5 and 9-11 are rejected under 35 U.S.C. 112, second paragraph.

Claims 2-5 and 9-11 recite the limitation "**the** input device" and claims 4, 5 and 11 recite the limitation "**the** output device", which were not previously mentioned. There is insufficient antecedent basis for this limitation in the claim.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 5 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. To be specific, claims 4, 5 and 11 claim that said intra-changeable elements are included in both the input and the **output device** of said communication unit, and that said processor modulates said intra-changeable elements. The specification does not clearly explain what is an output device and how said intra-changeable element is included in said output device (column 7 line 13 to column 8 line 5).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4-8, 11, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Nomura et al. U.S. Patent 6,700,508.

**Regarding claim 1**, Nomura et al. teaches a communication unit (Figure 1, unit 1) having a processor (Figure 2, unit 10) for control of said communication unit, which further includes intra-changeable elements (column 2, lines 39-46; units 3. As indicated on page 9 lines 8-12 of the specification of this application, then the term “intra-changeable elements” are elements in which their physical characteristics such as form, position, color, size etc. maybe changed as a result of a mechanical or electrical signal) being controlled by said processor, and where said elements are used in the user interface of said communication unit (the elements disclosed by Nomura et al. are indeed being used in the user interface of said communication unit).

**Regarding claim 6**, the intra-changeable elements disclosed by Nomura et al. are also compressible and expandable (column 2, lines 42-47).

**Regarding claims 7 and 8**, the intra-changeable element disclosed by Nomura et al. are also piezo-electrical elements and elasto-resistive (column 3, lines 37-41).

**Claim 16** is rejected for the same reasons as claim 1. The changeable element disclosed by Nomura et al. also changes characteristics in response to the control signal thereby providing a sensory message to a user (column 5, lines 21-28).

**Regarding claim 17**, the changeable characteristic of the changeable element disclosed by Nomura et al. also includes change in form (column 3, lines 38-41).

***Allowable Subject Matter***

7. Claims 12-15 are allowed.

**Regarding claims 12 and 14**, the prior arts of record fail to teach or disclose a method for inputting of data to a communication unit as claimed in claims 12 and 14, wherein the keypad is provided with intra-changeable keys to provide sensory indication of the keys available (as supported on page 6 line 13 to page 7 line 11 of the specification).

**Regarding claim 13**, the prior arts of record fail to teach or disclose a method for transferring an input from a first communication unit to a second communication unit, and displaying said input as output in said second communication unit, wherein operation of said first communication unit includes transforming the input from said intra-changeable elements of said input device to electrical signals; transferring said electrical signals from said first communication unit to a second communication unit; and wherein said second communication unit includes receiving said electrical signals from said first communication unit to said second communication unit; retransforming said electrical signals in said second communication unit to output signals to intra-

changeable elements of said second communication unit; and transferring said output signals to said intra-changeable elements of said second communication unit and expand said intra-changeable elements according to said output signals.

**Claims 2, 3, 9, 10, 18 and 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2, 3, 9 and 10, the prior arts of record fail to teach or disclose a communication unit as claimed in claim 1 characterized in that said intra-changeable elements are included in the input device of said communication unit, wherein the processor modulates the intra-changeable elements to provide a sensory indication of the options of said input device (as explained on page 6 line 13 to page 7 line 11 of the specification).

**Regarding claims 18 and 19**, the prior arts of record fail to teach or disclose a communication device as claimed in claims 16, wherein the intra-changeable element generates a control signal in response to a change in its characteristic.

### ***Conclusion***

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Dang whose telephone number is 703-305-1836. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Hung Dang  
8/31/2004  
H.D.

HD

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

